

Claims 19, 20, 43 and 44 stand rejected under 35 USC 103(a) on Tsuchiya in view of Tanizaki. Claims 24 and 46 stand rejected under 35 USC 103(a) on Tsuchiya in view of Yokoyama and Akao. Claims 25-32 and 34-40 stand rejected under 35 USC 103(a) on Tsuchiya in view of Yokoyama. These rejections are respectfully traversed.

All of the rejections rise or fall on the Examiner's application of Tsuchiya to reject claims 1-8 and 10-16, since the secondary references applied in the remaining rejections are not cited to, and do not, respond to the failure of Tsuchiya to disclose the limitations of the independent claims in this application. The Examiner has not taken issue with this argument, presented by applicants on page 6 of the amendment filed February 26, 2003, so applicants do not think it is necessary to extend these Remarks by rearguing a point the Examiner has conceded.

The Examiner's position on Tsuchiya boils down to two points: (1) Tsuchiya's silence on slip additives meets the limitation of "a polyolefin resin layer free from slip additives" and (2) the limitation "wherein said discharge-treated surface is formed in an atmosphere consisting essentially of CO<sub>2</sub> and N<sub>2</sub> to form said nitrogen functional groups and wherein the laminate film has a barrier durability under 9% elongation of 46.5 cc/m<sup>2</sup>/day or less oxygen transmission rate through the laminate film" is a product-by-process limitation given little weight in process claims. Both of these points are incorrect: Tsuchiya does not disclose or claim either of these positive features of applicants' invention.

Point (1) on its face is illogical. The Examiner seems to be saying that the failure of Tsuchiya to say anything about slip additives means that Tsuchiya teaches a polyolefin layer that is intentionally free of slip additives. Silence is no teaching at all, either positive or negative; the lack of a teaching cannot make anything obvious. Nonetheless, applicants respectfully submit, contrary to the Examiner's interpretation, that Tsuchiya *does* contain teachings about slip additives and teaches to use them, contrary to what applicants claim.

The [hydroxy fatty acid glycerides] Tsuchiya discloses are, in fact, slip agents, even if Tsuchiya does not use the words "slip agent" to describe them. Tsuchiya makes a point of his

invention having “excellent slipperiness” by virtue of its additives, including hydroxy fatty acid glycerides. In column 4, lines 16-22, Tsuchiya states that if not enough glyceride is used, the slipperiness of the film is “not satisfactory.” This is a clear teaching that the glyceride is used as *test* an agent to improve slip properties and is thus is a slip agent.

Column 5, lines 22-34, of Tsuchiya indicates that various organic additives may be incorporated into the film. Tsuchiya’s list includes oleic amide, stearic amide, and erucic amide, which are well-known migratory slip agents. Tsuchiya lumps these amides in the list with various glycerides as well. Thus, a person of ordinary skill in the art would have drawn the conclusion that these glycerides also act as slip agents.

Tsuchiya’s Comparative Examples 4 and 8 constitute strong evidence that Tsuchiya considers hydroxy fatty acid glycerides to be slip agents that are essential in providing slipperiness to Tsuchiya’s film. Tsuchiya Comparative Example 4 shows that when the amount of glyceride is too low, “slipperiness was relatively poor” (column 10, lines 57-59), and the COF values in Comparative Example 4 in Tsuchiya Table 1 are high (0.83/0.70) compared to the COF of a film with the proper amount of glyceride (Example 1, COF = 0.44/0.36). Similarly, Tsuchiya comments regarding Comparative Example 8, which does not contain any hydroxy fatty acid glyceride that the “friction coefficient was large” (column 11, lines 10-11). Comparative Example 8, like Comparative Example 4, shows a high COF value of 0.80/0.77 vs. a COF value for Tsuchiya’s inventive film of 0.44/0.36. Thus, it is clearly evident from Tsuchiya’s results that his hydroxy fatty acid glyceride acts and functions as a migratory slip agent. To use a variant of the familiar expression, “If it *acts* like a slip agent and *works* like a slip agent, it must *be* a slip agent.”

Since the films tested by Tsuchiya without slip agents had poor properties, persons of ordinary skill in the art would not have been motivated by Tsuchiya to depart from Tsuchiya’s disclosure so as to arrive at the claimed invention by not using slip additives in the claimed

polyolefin resin layer. For this reason alone, applicants' claims are patentable over the prior art of record. TRK

The Examiner's point (2) is also without merit. First, the Examiner has both overlooked other language in the claims to which the quoted limitation refers and misread the limitation itself. Furthermore, the Examiner is not entitled to ignore limitations which form part of the subject matter of the invention as a whole in deciding whether persons of ordinary skill in the art would have been motivated by the disclosure of Tsuchiya by itself to arrive at the invention of the broadest claims.

The language "wherein said discharge-treated surface is formed in an atmosphere consisting essentially of CO<sub>2</sub> and N<sub>2</sub> to form said nitrogen functional groups and wherein the laminate film has a barrier durability under 9% elongation of 46.5 cc/m<sup>2</sup>/day or less oxygen transmission rate through the laminate film" refers to "said nitrogen functional groups," referring back to antecedent basis in the claims. The antecedent expression reads, "comprising at least 0.3% nitrogen functional groups on said discharge-treated surface," which defines the amount of nitrogen functional groups on the discharge-treated surface in positive terms that do not rely on the steps by which the nitrogen functional groups are provided. This is *not* a product-by-process limitation.

The Examiner has pointed to nothing in any of the references which specifically discloses amounts of [nitrogen functional groups on discharge-treated surfaces of polyolefin films] and has presented no evidence that the nitrogen functional group content claimed would have been obvious from any reference of record. Although Tsuchiya does refer to a ratio of nitrogen atom number to carbon atom number, the Examiner has failed to point to anything in Tsuchiya itself or any other reference to correlate this ratio to what applicants claim or to show that nitrogen functional group content is a variable any person of ordinary skill in the art would have considered result-effective to optimize or vary. Applicants do not bear the burden of showing that it would not have been obvious to choose the claimed nitrogen functional group content until

the Examiner presents a *prima facie* case of obviousness to rebut. The Examiner has presented nothing to rebut Mr. Chang's explanations under oath of why Tsuchiya does not disclose the claimed nitrogen functional group contents.

Another portion of the limitation which the Examiner has misconstrued is the requirement that "the laminate film has a barrier durability under 9% elongation of 46.5 cc/m<sup>2</sup>/day or less oxygen transmission rate through the laminate film." On its face that is not a product-by-process limitation at all; it is a recitation of a measurable, concrete physical property of the claimed film. Barrier durability is a property that is defined in art-recognized standards and is not a statement of how the product was made. The Examiner's logic fails to respond in any way to this limitation.

By making all of the rejections of record under 35 USC 103(a) the Examiner implicitly concedes that Tsuchiya does not by itself disclose the claimed invention. Persons of ordinary skill in the art would not have been motivated by what is disclosed in Tsuchiya alone to modify what Tsuchiya discloses so as to arrive at the invention of claims 1-8 and 10-16, and the Examiner has presented no evidence or explanation of how or why persons of ordinary skill in the art would have deviated from Tsuchiya's disclosure to arrive at the claimed invention. The remaining secondary references cited by the Examiner are not cited to overcome, and do not respond to, these deficiencies of Tsuchiya and thus do not complete any case of obviousness as to the claims against they were cited. None of the prior art, individually or in combination, would have motivated persons of ordinary skill in the art to arrive at the claimed invention in all of its aspects.

In light of the above, early allowance of claims 1-20, 24-44 and 46 is solicited.

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Respectfully submitted,

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